1. **Research Design & Methodology**

The methodological process in research refers to the scientific steps or procedures embarked by the researcher towards identifying, gathering, selecting, processing, and analysing relevant data peculiar to the study phenomenon. It provides a systematic design of the step-by-step process that is used by the researcher in addressing the aims and objectives of the research. Scholars commend that these procedural processes of conducting research are important in ensuring reliable, valid, and trustworthy (Ryder, Mackean, Coombs, Williams, Hunter, Holland and Ivers, 2020). The primary interests of every methodology process are to clarify, firstly, how the relevant data towards the completion of the study will be collected, and secondly, outline the procedure for analysing the gathered data (Nayak and Singh, 2021). This study seeks to explore the impact of social media marketing on brand equity of the Engen (Petronas) Lubricants in South Africa, it will conduct an exploratory research. This study's use of exploratory research is important since the “Petronas brand” is new in the South African market. Hence, to gain insight on the impact experiences of the Engen South Africa marketing team with the “Petronas brand” particularly on their social media platforms, an exploratory study will be useful. This section will discuss the choice of research paradigm for the study, the research design, target population and sample, data collection instruments that will be used, the data analysis approach, the research quality control, and the ethical procedures that will be followed.

* 1. **Interpretive research paradigm**

This study is exploratory in nature; thus, it falls within the interpretivism paradigm. Interpretive research paradigm emphasizes more on the importance of qualitative analysis as opposed to quantitative analysis, hence, the study will adopt a qualitative approach. Engaging the interpretivism paradigm in research allows for the integration of unique and contextual interests existing in human society (Dudovskiy, 2021). Therefore, the interpretivist approach advances qualitative interests that help the researcher understand the access and interpretation of social realities existing in a particular study phenomenon (Alharahsheh and Pius, 2020). Though, proponents against interpretivism, qualitative research consider it to be subject to biases and producing knowledge that cannot be generalized, it was chosen for this study since helps to provide in-depth insight of issues, produce trustworthy and honest information, and multiple valid information on the impact of the study phenomenon (Dudovskiy, 2020). This study utilizes the interpretive paradigm to explore the perception of marketing experts on the impact of social media marketing of the Petronas brand. It seeks to have an in-depth understanding of the different positive and negative impacts being experienced and measures that can be utilized towards maximizing the potential of the Petronas brand in the market. Therefore, the study will use a qualitative case study research design.

* 1. **Qualitative case study research design**

A research design is the blueprint that is used to conduct a research project (Haydam and Steenkamp, 2020). It provides specific thinking procedures that are used in guiding the obtaining of relevant study information needed to address the research problems (Creswell, 2016). According to Haydam and Steenkamp (2020), a research design outlines the procedural plan used by the researcher to accurately answer key research questions, address key objectives, and solicit relevant data. Hence, some scholars consider it a strategic framework for action that is used to bridge the key study questions and implement a research approach (Creswell, 2016).

Different research designs include case study design, exploratory design, explanatory design, descriptive design, experimental design, etc. Each research design helps to identify a specific research approach that can be appropriate in conducting a study. Therefore, this study will make use of a qualitative case study design because of its contextual lenses towards exploring multiple aspects of study phenomena (Zuhdi, Rainanto and Apriyani, 2020). The choice of using a case study design was informed by the interest to engage qualitative in-depth interviews with the Engen marketing and sales team. To explore and understand their perceptions and experiences on the impact of social media marketing approaches on the brand equity of the new “Petronas brand” products.

* 1. **Target population and sample**

A study population refers to a specific group of people that the research targets to draw a research sample for study purposes (Blaum, Brunner, Kröger, Braetz, Lorenz, Goßling, Ojeda, Koester, Karakas, Zeller, and Westermann 2021). The target population for this study will be drawn from the Engen South Africa marketing and sales team. This team consists of Distributor Business Development Executives; Lubes Business Advisors; Trade Marketing Specialists; Customer Experience & Marketing Intel Executives; Media & Communication Executives; Customer Experience & Marketing Intel Executives; Automotive specialists; Route to Market Support Manager; High Street Distributor Key Account Manager; Marketing Coordinators; Technical Advisors; High Street Distributor Key Account Managers, and; Marketing Administrators.

* + 1. **Sampling technique**

Sampling refers to the process of selecting individuals or objects that represent the entire population in a study (Creswell and Miller, 2013: 22). There are only two sampling approaches which include the non-probability sampling and probability sampling. This study will make use of non-probability sampling methods. In non-probability sampling, the elements that make up the sample are selected by non-random methods and there are three main methods: convenience, quota, and purposive (Saunders et al., 2016). This study will be conducted using purposive sampling method.

Purposive sampling dominantly relies on the researcher’s discretion and judgment in selecting and choosing relevant participants to participate in the study (Campbell, Greenwood, Prior, Shearer, Walkem, Young, Bywaters and Walker, 2020). Using purposive sampling, a small data set selection will be made based on the researcher’s criteria which include: (1) being a member of the Engen South Africa marketing team; (2) minimum of three working years in the Engen marketing department; (3) those working directly on the Petronas brand; and (4) willingness of the identified participants to participate in the study. This means the researcher will target key informants who have expert knowledge on the Engen Petronas brand, the organisation's marketing processes, and provide detailed information on the challenges and opportunities surrounding the brand and the existing processes. Hence this will make the inquiry rich and crucial towards gaining expertise, experience and knowledge (Doringer, 2021).

* + 1. **Selection of the sample**

The sample for the interviews is as follows:

Fifteen (n=15) participants who are directly involved in the Engen SA marketing and sales team:

**Table 1: Sample Size Selection**

|  |  |  |
| --- | --- | --- |
| **Target Population** | **Sampled Participants** | **Sample Size** |
| Executives in Marketing & Business Development | Distributor Business Development Executive; Customer Experience & Marketing Intel Executive; Media & Communication Executive; Customer Experience & Marketing Intel Executive | 4 |
| Advisors, Coordinators & Administrators | Lubes Business Advisor; Technical Advisor; Marketing Coordinator; Marketing Adminstrator | 4 |
| Marketing Specialists | Trade Marketing Specialists (x3); Automotive specialist | 4 |
| Managers | Route to Market Support Manager; High Street Distributor Key Account Manager (x2) | 3 |

* 1. **Data Collection Instruments**

The process of data collection refers to the gathering of relevant information that considered essential towards measuring or analysing key study variables of interest. This process is done systematically through a uniform approach, using specific research instruments such as interviews, surveys, observation tools, or secondary data analysis. These instruments are essential to answer the key research questions, test given hypotheses and provide an evaluation of the outcomes (Campell et al. 2020). Hence, for this study data will be gathered using primary qualitative semi-structured interviews and secondary data. These interviews will be conducted through face-to-face Zoom meetings, while the secondary data will be accessed from existing literature (journal articles and published books), company reports and relevant credible online sources.

* + 1. **Semi-structured interviews**

The instrument to collect information from the participant is semi-structured interview guide. Abd Gani, Rathakrishnan and Krishnasamy (2020: 140) describes semi-structured interviews as “a form of conversation where the researcher asks questions without strictly following a formalized list of questions.” The interview guide will be used in this case to guide the researcher and the informant on what crucial questions to ask. The researcher will ask open-ended questions to allow the informant a degree of flexibility to engage and express their opinion about every question they are asked. The interview question that will be used to develop the interview guide will be directly informed by the key research questions of the study. The use of semi-structured interviews is carefully selected for this study because it allows the researcher to probe the informants to draw out more information about the phenomenon under investigation.

As an employee of Engen, the researcher will have a by-in to interview the relevant Engen personal towards the completion of this study. Hence, the researcher will first reach out to all the potential participants through email and telephonic conversations to invite them to participate in the study. Following consent, a information letter and consent form will be sent to all the participants who would have shown interest in the study. The information letter will consist of the detailed study description, the title, purpose, aim, key objectives of the study and a copy of the interview schedule. After agreeing on the appropriate for the interview, a consent form will be signed and a Zoom meeting scheduled. Considering the Covid-19 pandemic restrictions a Zoom meeting will be the most appropriate health measure. The semi-structured interviews will be conducted using a similar interview schedule to gather consistent and relevant information. Each interview is expected to last between 35-45 minutes, and all the interviews will be recorded with consent of the participant. All the Zoom interviews will be conducted at a time and place that is comfortable for the participant and every participant will be made aware of their right to withdraw from the study without any consequences whenever they feel uncomfortable.

***Pilot test***

A pilot study refers to “a small-scale test of the methods and procedures to be used on a larger scale.” (Leon, Davis, and Kraemer 2011) To assess the effectiveness of the data collection instrument for this study, the researcher will carry out a pilot study with 3 participants. According to Creswell (2011: 4) a pilot study allows the researcher to “expose deficiencies and problems in the research instruments and protocols.” When the pilot study is completed, the researcher will make some adjustments to the instruments if there are some discrepancies.

* + 1. **Secondary data extraction**

Secondary data involved information that is extracted from existing literature. This study will make use of mostly peer-reviewed journal articles and books that will be accessed on different online platforms accessible through the online university library database. It will also utilise relevant reports and documents that are readily available on company websites and other credible sources. The online data will be collected using Cloud-based ETL tools to make data readily available through an Extract, Transform and Load approach (Coomes and Haghbayan, 2020). This means the secondary data extraction will follow three stages which include:

1. **Extraction**- this is the first step which was used to access relevant articles that were used in developing this research study using different online library portals such as EbscoHost, Google Scholar, Sabinet or JStor. The researcher made use different journal articles that extracted using generated key words such as “Social Media marketing” and “Brand Equity” and relevant data was extracted.
2. **Transformation-** The extracted data was then refined through the transformation stage where the data is sorted, organised and cleaned. A relevant audit was conducted to remove similar entries, remove studies with missing values of interest and to select data that is more reliable.
3. **Loading-** The final stage involves delivering and organising the transformed and high-quality data single and unified data location which might include a drop box for storage and analysis purposes. The loaded data can be summarised in a table format for easier review purposes.
   1. **Data analysis**

Data collected for this study will be analysed using Braun & Clarke’s latent thematic data analysis. This means the study will be analysed through a consistent pattern that helps to identify, analyse, and interpret the meaning of consistent themes that are identified using Braun & Clarke’s 15-point checklist which is as follows:

**Table 2: Fifteen-point checklist for proper thematic analysis**

|  |  |  |
| --- | --- | --- |
| Process | No. | Criteria |
| Transcription | 1 | “The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for accuracy.” |
| Coding | 2 | “Each data item has been given equal attention in the coding process.” |
|  | 3 | “Themes have not been generated from a few vivid examples (an anecdotal approach), but instead, the coding process has been thorough, inclusive and comprehensive.” |
|  | 4 | “All relevant extracts for all each theme have been collated.” |
|  | 5 | “Themes have been checked against each other and back to the original data set.” |
|  | 6 | “Themes are internally coherent, consistent, and distinctive.” |
| Analysis | 7 | “Data have been analysed – interpreted, made sense of - rather than just paraphrased or described.” |
|  | 8 | “Analysis and data match each other – the extracts illustrate the analytic claims.” |
|  | 9 | “Analysis tells a convincing and well-organised story about the data and topic.” |
|  | 10 | “A right balance between analytic narrative and illustrative extracts is provided.” |
| Overall | 11 | “Enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly.” |
| Written report | 12 | “The assumptions about, and specific approach to, thematic analysis is explicated.” |
|  | 13 | “There is a good fit between what the researcher claims to do, and what the researcher shows to be done – i.e. described method and reported analysis are consistent.” |
|  | 14 | “The language and concepts used in the report are consistent with the epistemological position of the analysis.” |
|  | 15 | “The researcher is positioned as active in the research process; themes do not just emerge.” |

**Source:** Adapted from Braun and Clarke (2006:96)

Following these identified steps the gathered and recorded audio interviews will be carefully transcribed to ensure accurate capturing of information. The transcripts will be read and re-read and corrected of any errors. Through the process of re-reading the research will identify consistent terms and phrases that used by participants to familiarise with the information and generate key study themes. The data will then be categorised and coded into main and sub-themes that are related to social media marketing and brand equity as displayed by the Engen SA marketing and sales team. These organised themes will then be presented as key heading in the presentation of findings, they will be interpreted and discussed reflecting on existing literature and key study theories.

* 1. **Data Quality Control**

In qualitative research it is essential to ensure that the study is reliable and trustworthy. Reliability in qualitative research requires use of rich textual descriptions that are accessed from credible sources and accurate transcriptions of primary data (Creswell and Poth, 2018). To ensure that this study is reliable and trustworthy, the study made use of the following steps:

***Rigorous Process***- Rigour refers to the use of sufficient and acceptable research standards which include using appropriate theoretical constructs, relevant and current literature, relevant data, clear sample, defined study context, and traceable data collection and analysis procedures (Tracy, 2010). The study will make use of these processes as detailed in the methodological procedure. Relevant data will be acquired through clear interview procedures that will last between 35-45minutes.

***Credibility***- Achieving the credibility of the study is shown through the research of research. Creswell (2011) notes that credibility refers to the confidence and truthfulness that can be placed in the research findings. This is achieved through the use detailed descriptions of information from reliable and relevant data sources, and through the use of more than one approach of collecting data thus triangulation. This study will make use of both primary and secondary data sources through careful observation and prolonged engagements to ensure the authenticity of the gathered information hence achieving credibility of the study.

***Transferability***- This refers to the process whereby the research findings of the study can be transferred to an entirely new setting with different participants (Neumann 2014). A clearly outlined research objectives and methodological process will be used in this study to ensure that the same process can be reproduced in a different context hence achieving transferability of research.

***Confirmability***- This is a situation whereby the findings of the study can resonate and be confirmed with other researchers or studies. The researcher will achieve confirmability through clearly outlining the steps that the researcher took in analysing the data as an audit trail that can be used by other researchers interests in testing or reproducing similar results in a different context.

***Dependability***- refers to the stability of the research findings over a long period time. For the researcher to guarantee dependability of the research, the supervisor and the peer review process at the university will be engaged to examine and review the study from proposal stage to the final article. This will ensure that the study output is dependable and consistent with key research interests and guidelines.

* 1. **Ethical considerations**

The study will adhere to the Wits University’s ethical standards and procedures of conducting research. It will adhere to the ‘do no harm’ principles of research (Kuper, Lingard and Levinson, 2008). This means the protection of participants will be held in high regard and the following procedures will be undertaken to ensure their protection:

***Gatekeepers letter***

The gatekeeper’s letter will be sought for the Engen South Africa as a measure to protect the participants and the organisation.

***Voluntary participation***

In any research, participants voluntarily participate and retain their right to withdraw from the study at any stage without any consequences. The participants will be debriefed of the details of the study through an information letter, and in the event of their acceptance to participate in the study, a consent letter will be signed.

***Informed consent***

There is no research interview that takes place before the participant’s consent and signing of the consent form. Thus, the researcher will make sure that the participants understand the nature of the research and give their consent to participating in the study and sign consent form. The information letter and consent form will be sent to the participant prior to the interview and the researcher will make sure that the consent is signed before the interview.

***Confidentiality and anonymity***

Confidentiality and anonymity are highly prioritised in research interviews. In this study, the identity of the participants will not be revealed. The participants will be informed that all recorded interviews and transcripts will only be accessed by the researcher and the supervisor. Each participant will be coded using code-names instead of the real names of the participants and no identifier will be recorded with the responses. Any information that might lead to the identity of the participant will not be used in the study to ensure that the participant remains anonymous in the presentation of the results.

***Ethical clearance***

The researcher will obtain an ethical clearance from the Wits Business School Research ethics committee before conducting the study. This will ensure that all relevant ethical standards are adhered to.